

## AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph beginning on page 10, line 18 with the following paragraph. A marked up version showing the changes and a clean version of the replacement paragraph are provided below.

### Clean Version:

FIGS. 5 and 6 are amino acid sequences of a *phb* locus (gene for biosynthesis of short-chain-length PHA) in *Pseudomonas* sp. HJ-2. FIGS. 5 and 6 contain one nucleotide sequence and three polypeptide sequences, which are aligned in parallel with the single nucleotide sequence. SEQ ID NO. 15 corresponds to the nucleic acid sequence; SEQ ID NO. 16 corresponds to the polypeptide beginning a nucleotide position 126 of the nucleic acid sequence; SEQ ID NO. 17 corresponds to the polypeptide beginning a nucleotide position 927 of the nucleic acid sequence; and SEQ ID NO. 18 corresponds to the polypeptide beginning a nucleotide position 2233 of the nucleic acid sequence.

### Marked-up Version

FIGS. 5 and 6 are amino acid sequences of a *phb* locus (gene for biosynthesis of short-chain-length PHA) in *Pseudomonas* sp. HJ-2. FIGS. 5 and 6 contain one nucleotide sequence and three polypeptide sequences, which are aligned in parallel with the single nucleotide sequence. SEQ ID NO. 15 corresponds to the nucleic acid sequence; SEQ ID NO. 16 corresponds to the polypeptide beginning a nucleotide position 126 of the nucleic acid sequence; SEQ ID NO. 17 corresponds to the polypeptide beginning a nucleotide position 927 of the nucleic acid sequence; and SEQ ID NO. 18 corresponds to the polypeptide beginning a nucleotide position 2233 of the nucleic acid sequence.

Please replace the originally filed Abstract with the Abstract provided below. A marked up version showing the changes and a clean version of the Abstract are provided below.

Clean Version

**ABSTRACT**

Provided is a PHB block copolymer having orientation-induced rubber-elasticity and temperature-sensitive shape memory effects, comprising a plurality of 3-hydroxybutyrate (3HB) blocks as a repeating unit and a plurality of 3-hydroxyvalerate (3HV) blocks as a repeating unit, and optionally a hydroxy acid repeating group containing 6 or more carbon atoms. The PHA block copolymer exhibits orientation-induced rubber-elasticity and shape memory effects with a fast shape-recovery rate, and therefore such characteristics in conjunction with physical properties such as biodegradability and biocompatibility unique to PHA enable application thereof to a variety of uses.

Marked-Up Version

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Provided is a PHB block copolymer having orientation-induced rubber-elasticity and temperature-sensitive shape memory effects, comprising a plurality of 3-hydroxybutyrate (3HB) blocks as a repeating unit and a plurality of 3-hydroxyvalerate (3HV) blocks as a repeating unit, and optionally a hydroxy acid repeating group containing 6 or more carbon atoms.

———The PHA block copolymer exhibits orientation-induced rubber-elasticity and shape memory effects with a fast shape-recovery rate, and therefore such characteristics in conjunction with physical properties such as biodegradability and biocompatibility unique to PHA enable application thereof to a variety of uses.